



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/684,869      | 10/14/2003  | Joshy Joseph         | POU920030041US1     | 4782             |

7590 05/16/2007  
William A. Kinnaman, Jr.  
IBM Corporation - MS P386  
2455 South Road  
Poughkeepsie, NY 12601

|          |
|----------|
| EXAMINER |
|----------|

KUNAMNENI, HARI P

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2109

|           |               |
|-----------|---------------|
| MAIL DATE | DELIVERY MODE |
|-----------|---------------|

05/16/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/684,869

Applicant(s)

JOSEPH, JOSH Y

Examiner

Hari Kunamneni

Art Unit

2109

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>June 7, 2004</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED OFFICE ACTION**

### ***Objections to Specification***

1. Specification is objected to because, the background of the invention need to discuss the relevance of the references rather than just an incorporation of references. Please refer to the following content of specification for guidance in making appropriate correction to the background of the specification.

### **Content of Specification**

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the

Art Unit: 2109

permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
  - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
  - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds,

and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

### ***Claim Objections***

2. Claims 5 and 14 objected to because of the following informalities:

Claim 5 and 14, line 1, delete one of repeated, "in which".

Appropriate corrections are required.

***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-17 are rejected under 35 U.S.C. 101 because they are non-statutory subject matter.

Claims 1, 10 and 18 are rejected because, the specification states, the inventions may be implemented in software, "While the invention is preferably implemented in software ...", page 6, line 1. The software, is not a machine, method, composition of matter, or article of manufacture. Therefore, claims 1, 10 and 18 are not statutory subject matter.

Since claims 2-9 depend on claim 1, claims 11-17 depend on claim 10, and 19-20 depend on claim 18, and therefore, they are also rejected as being non-statutory subject matter.

This rejection can be overcome by amending the specification as, "While the invention is preferably implemented in software, the invention may be implemented in hardware, software, or some combination of the two." to, "The invention can be implemented in hardware, or combination of hardware and software."

Claims 1-20 are further rejected, because, the claims are statutory, but lack tangible output.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 10, 18 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Ahvonen et al (US 2004/0116117 A1).

For claim 1, 10 and 18:

In a service-oriented architecture (see FIG. 4, several services, FUTURE APPLICATION, WAP, APN, MMS, VOIP, PC APPLICATION ETC. provided using underlying architecture) in which a client invokes a service from a service provider (FIG. 7, rightmost item, "BASED ON SUBSCRIPTION PROFILE RECEIVED FROM SUBSCRIBER DIRECTORY, SEE PRVIOUS SLIDE", which implies there is a service provider) using a selected transport binding (FIG. 6, communication between item 160, 130, and 140 implies that there is a transport binding to send initial message) a method of invoking said service () comprising the steps of:

negotiating a service binding (FIG. 6, see negotiation from item 160, 130, 440, 405, 425, 420, 425, 405, 440, 130, to 160 final ACTIVATE PDP CONTEXT ACCEPT, resulting for binding of particular QOS) for a service invocation from said service provider in a negotiation process using a first transport binding; and

handling said service invocation using the service binding negotiated in said negotiation process (As an example of service invocation, FIG. 6, item 100, "STREAMING SERVER OR RTSP PROXY" UE receiving, "ACTIVATE STREAMING BEARER PDP CONTEXT ACCEPT", which results in activation of streaming service).

For claims 2 and 11:

The method of claim 1 (see supra for claim 1 discussion) in which said client (FIG. 9, client is items 160, 130, 440, 405, 425, 420, and 410) is on a client side of a communication path (FIG. 9, client is connected to STREAMING SERVER, Item 100, therefore client is on the client side of communication path), said steps being performed on said client side of said communication path (FIG. 9, all negotiation steps performed on client side, i.e. negotiation steps of 160 → 130 → 440 → 405 → 410 → 405 → 440 → 130 → 160, resulting in invocation of STREAMING BEARER CONTEXT).

For claim 3 and 12:



The method of claim 1 (see supra for claim 1 discussion) in which said service provider (FIG. 9, item 100, RTSP (real time service provider) proxy) is on a server side (FIG. 9, server side is item 130, 440, 405, 425, 420, 405, 410, and 100 (RTSP Proxy)) of a communication path, said steps being performed on said server side of said communication path (FIG. 9, the steps are performed on server side, server being items 130, 440, 405, 435, 420, and 410).

For claim 4 and 13:

The method of claim 1 (see supra for claim 1 discussion) in which said client (FIG. 9, item 160) is on a client side of a communication path (communication path is between item 160 and 130) and said service provider is on a server (server is items 100 RTSP PROXY, item 410, 405, 435, 420, 440, and 130) side of said communication path, said service binding being negotiated directly between said client side and said server side of said communication path (client Item 160 is one side of communication path and item 130 part of server is on the other side of communication path, and the negotiation has occurred between 160 and 130, client and server).

For claim 5 and 14:

The method of claim 1 (see supra for claim 1 discussion) in which said client (client is 160, 130, 440, 405, 425, and 420) is on a client side of

a communication path (is between item 405 and 410) and said service provider is on a server (server is items 410 and 100 RTSP Proxy) side of said communication path, said steps are performed on said client side (FIG. 9, steps between 160 and 130, 130 and 440, 440 and 405, 405 and 425, and 425 and 420 are performed on client side) and said server side (step 405 and 410 are performed on server side) of said communication path.

For claim 6 and 15:

The method of claim 1 (see supra for claim 1 discussion) in which said service invocation (FIG. 9, from item 160 STREAMING REQUEST) passes through one or more intermediary nodes (FIG. 9, Items 440, and 405 are intermediary nodes) along a communication path (FIG. 9, Communication path is between item 405 and 410) between said client (FIG. 9, Client is item 160 and Item 130) and said server (server is 410 and 100) as end nodes, said method steps being performed by one of said intermediary nodes with an adjacent node along said communication path between said client and said server.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to

Art Unit: 2109

be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahvonen et al in view of SOAP Version 1.2 Part 0: Primer.

Ahvonen et al teaches all claim elements (see supra claim 1 discussion) except intermediate nodes in the communication path to negotiate between the adjacent nodes.

The general concept of adjacent nodes negotiating for binding is well known in the art as illustrated by SOAP Version 1.2 Part ): Primer, section 4.1 Using SOAP intermediaries in conjunction with Section 3, Using various transport bindings (Section 4.1 describes how intermediary nodes pass SOAP message to other nodes in the communication path to the final destination node and Section 3, describes how to bind various protocols like, HTTP, SMPT, etc.).

It would have been obvious to one in skilled in the art at the time of invention to modify Ahvonen et al to negotiate intermediary nodes to bind transport protocol in order to negotiate protocol binding by the intermediary nodes (see Section 4.1 and Section 3 as described supra).

8. Claims 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahvonen et al in view of Koppolu et al. (US 6401099 B1).

For claim 8 and 19, Ahvonen et al. teaches all claim limitations (see supra for claim 1 discussion), except for client to check if server can perform the binding steps, if server can bind use server binding.

The general concept of checking and using server binding is well known in the art as illustrated in Koppolu et al (see FIG. 8A, Item 252, GET BIND INFORMATION FROM BIND CONTEXT (See FIG. 7, Bind context exists in System (server)) and see it Object is running (item 254), if running retrieve the object, i.e. use the object on the server).

It would have been obvious to one in skilled in the art at the time of invention to modify Ahvonen et al to for client to check if server can perform the binding steps, if so using the server binding steps in order to asynchronously bind the protocol as taught by Koppolu et al (see title, "Asynchronous Binding of Named Objects", binding of objects is equivalent to binding transport protocols).

For claim 20, Ahvonen et al. and Koppolu et al teaches all claim limitations as discussed above except for using client side information, when server is not capable of running the Binding steps.

The general concept of obtaining binding information from client when server is not capable of running binding service is well known in the art as illustrated Koppolu et al. (FIG. 8A, item 256, and 257).

It would have been obvious to one in skilled in the art at the time invention to modify Ahvonen et al and Koppolu et al to obtain binding

information from client side in order to asynchronously bind the object  
(See title, "ASYNCHRONOUS BINDING OF NAMED OBJECTS").

## **CONCLUSION**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hari Kunamneni whose telephone number is (571)274-1592. The examiner can normally be reached on Monday thru Friday 7:30-5:00 PM alt. fridays off.

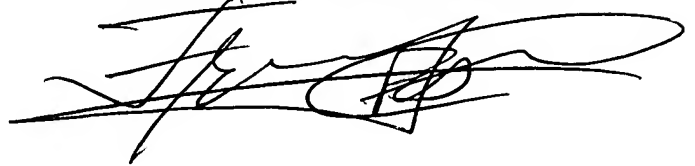
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, FRANTZ JULES can be reached on (571 )272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2109

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HPK  
5/11/2007

FRANTZ JULES  
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Frantz Jules', is written over a horizontal line. The signature is stylized with a large loop at the end.